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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,956	11/13/2001	Manuel Barbosa	1356-041	6385
25215 7590 08/21/2007 DOBRUSIN & THENNISCH PC 29 W LAWRENCE ST SUITE 210 PONTIAC, MI 48342			EXAMINER NGUYEN, XUAN LAN T	
			ART UNIT 3683	PAPER NUMBER
			MAIL DATE 08/21/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

09/986,956

Applicant(s)

BARBOSA, MANUEL

Examiner

Lan Nguyen

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 June 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 29 June 2007 is: a) ☐ approved b) ☒ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \*   c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: *disapproved drawings*.

## DETAILED ACTION

### *Drawings*

1. The drawings were received on 6/29/07. These drawings are not approved.
2. The drawings are further objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed feature "a first spring for connecting the lower portion of the first and second brake shoes for maintaining contact of the first and second brake shoes against the surface of the lower actuating block" in claims 24 and 26 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Please note page 4 of the specification, paragraph 16 where it states "A spring 28 is connected between the ends of the levers to hold ends 22 and 24 to surfaces 18 and 20."

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 24 and 26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 24 and 26 claim "a first spring for connecting the lower portion of the first and second brake shoes for maintaining contact of the first and second brake shoes against the surface of the lower actuating block". These claimed features was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Due to these deficiencies, these claimed features are not further treated.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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6. Claims 15-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- An "anchor block" is sometimes referred to as an "actuating block". The claimed terms need to be consistent.
- Claimed features: "application of force, an applied force, application of the drum brake system, application of the parking brake, etc." are all very confusing. Does Applicant intend to claim different forces or just one braking force? Please clarify the force/forces recited in the claims and provide proper antecedent basis for it/them.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 15-23, 25, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spiller et al. in view of Yamamoto.

Re: claim 15, Spiller shows a dual leading-shoe drum brake system, as in the present invention, comprising: a backing plate 10 defining a vertical and horizontal axis; an upper anchor block 16 secured to an upper portion of the backing plate and a lower anchor block 15 secured to a lower portion of the backing plate; a first 51 and a second

51 actuating lever located on opposite sides of the vertical axis and being configured to engage the lower anchor block 15 as shown, a first brake shoe B pivotally mounted to the first actuating lever approximately at the midpoint of the shoe and a second brake shoe B pivotally mounted to the second actuating lever approximately at the midpoint of the shoe as shown, wherein mounting of the first and second brake shoes to the first and second levers, respectively, is achieved through a first and second pivotal connection 79; an actuator C located on the upper portion of the backing plate, the actuator engaging an upper end of the first and second actuating lever and being configured to apply a force thereto, wherein upon application of force to the upper ends of the actuating levers, said actuating levers rotate to cause an applied force to the first and second brake shoes through the first and second pivotal connection; wherein during application of the drum brake system the first and second actuating lever floats with respect to the backing plate as shown. Spiller shows a manual adjustment device 97, 98 but lack an automatic adjustment device. Yamamoto teaches an automatic adjuster link 88, 26 located on an upper portion of the backing plate to compensate brake shoes wear. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Spiller's brake system with an automatic adjuster link such as taught by Yamamoto in order to automatically adjusting the brake shoes according to brake lining wear levels. Since automatically adjusting the shoes would increase the effectiveness of the brake system and saving time for the driver from having to manually adjusting said shoes. Note that, Spiller's adjustment device 97, 98 connects the lower ends of the actuating levers 51, 51. As modified, Yamamoto's

automatic adjustment device would engage the upper ends of the actuating levers of Spiller in order to perform the function of adjusting.

Re: claim 16, Spiller also shows during a braking application of the drum brake system, the first and second brake shoes floats with respect to the backing plate.

Re: claim 17, Spiller's drum brake also lacks a parking brake actuator pivotally mounted to one of the first or second actuating lever and engaging the automatic adjustment device, wherein upon application of the parking brake, a force is applied to the other of said first or second actuating lever to cause a parking brake force to the first and second brake shoes through the pivotal connection. Yamamoto teaches a parking brake lever 30 pivotally attached to a web 62 of shoe 18 such that pivotal motion of said parking brake lever applies a parking brake force to said web 62 to operate the parking brake as described in the Abstract and in column 3, lines 45-50. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Spiller's brake system with a parking brake lever such as taught by Yamamoto in order to utilize the same brake system as a service brake and a parking brake. Since utilizing the same service brake system as a parking brake would save the cost of making a vehicle.

Re: claim 18, Spiller shows the upper and lower anchor blocks are located along the vertical axis formed through the central portion of the backing plate.

Re: claim 19, Spiller also shows that the first brake shoe B engages the upper anchor block when braking is applied in a first rotational direction and engages the

lower anchor block when braking is applied in a second rotation direction opposite the first rotational direction in line 70, column 3 to line 16 of column 4.

Re: claim 20, Spiller also shows that the second brake shoe engages the lower anchor block when braking is applied in a first rotational direction and engages the upper anchor block when braking is applied in a second rotation direction opposite the first rotational direction in line 70, column 3 to line 16 of column 4.

Re: claims 21 and 22, Spiller shows that figure 1 is a mirrored image of the other half of the drum brake.

Re: claim 23, Spiller shows the pivotal mounting of the actuating lever to the brake shoe comprise a pin 79 extending through an opening formed through both the actuating lever and brake shoe.

Re: claim 25, Spiller shows a second spring 72 for connecting the upper portion of the first and second actuating levers for maintaining contact of the first and second actuating levers against engagement features of the automatic adjuster, as modified by Yamamoto.

Re: claims 26 and 27, discussions of the rejections of claims 15-23 and 25 meet all the limitations of claims 26 and 27.

### ***Response to Arguments***

9. Applicant's arguments filed 6/29/07 have been fully considered but they are not persuasive.



- Applicant's argument about the drawing objection and the rejection pertaining to the claimed feature "a first spring for connecting the lower portion of the first and second brake shoes for maintaining contact of the first and second brake shoes against the surface of the lower actuating block" has been found non-persuasive. Applicant fails to cite any support from the specification. Applicant shows the original drawing. However, there is only one spring 28 showing on the bottom of the brake assembly. According to the specification, spring 28 is connected between the ends of the levers to hold ends 22 and 24 to surfaces 18 and 20, not to hold the brake shoes. The drawing objection and rejection are repeated above.
- Applicant also argues that Spiller's lower anchor block comprises of members. Applicant's argument is more specific than the claim language. The claims do not require the lower anchor block to be a one-piece.
- Applicant repeats the argument about Spiller's shoes and levers comprise a sliding engagement with a pivot pin while the instant invention comprises a pivotal connection. It is believed that a connection by a pivot pin would comprise a pivotal connection. The sliding feature is for self-alignment between the shoes and levers. However, the pivotally connection is shown with pivot pin 79.
- Lastly, Applicant argues that Spiller's levers are mounted to the back plate but not floated as claimed. In column 4, lines 44-54, Spiller shows that the shoe and the lever are in a floating arrangement with the back plate wherein the anchors 15 and 16 engage slots 19 and 58 respectively. The slots provide some freedom

for the shoe and the lever to move about. The arrangement is considered to be a floating arrangement. It is true that Applicant's specification recites the terms "float, floating, etc." However, how the shoes and lever float together relative to the back plate is unclear. For example, are they floating as balloons floating on air or are they floating as in Spiller's wherein, the anchors engage slots to provide some freedom for the shoe and the lever to move about the anchors and therefore, considered to be floating with respect to the back plate.

- For these reasons, the rejections and objections are still deemed proper and are maintained.

### ***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Nguyen whose telephone number is (571) 272-7121. The examiner can normally be reached on Monday through Friday, 7:30am to 4:00pm.

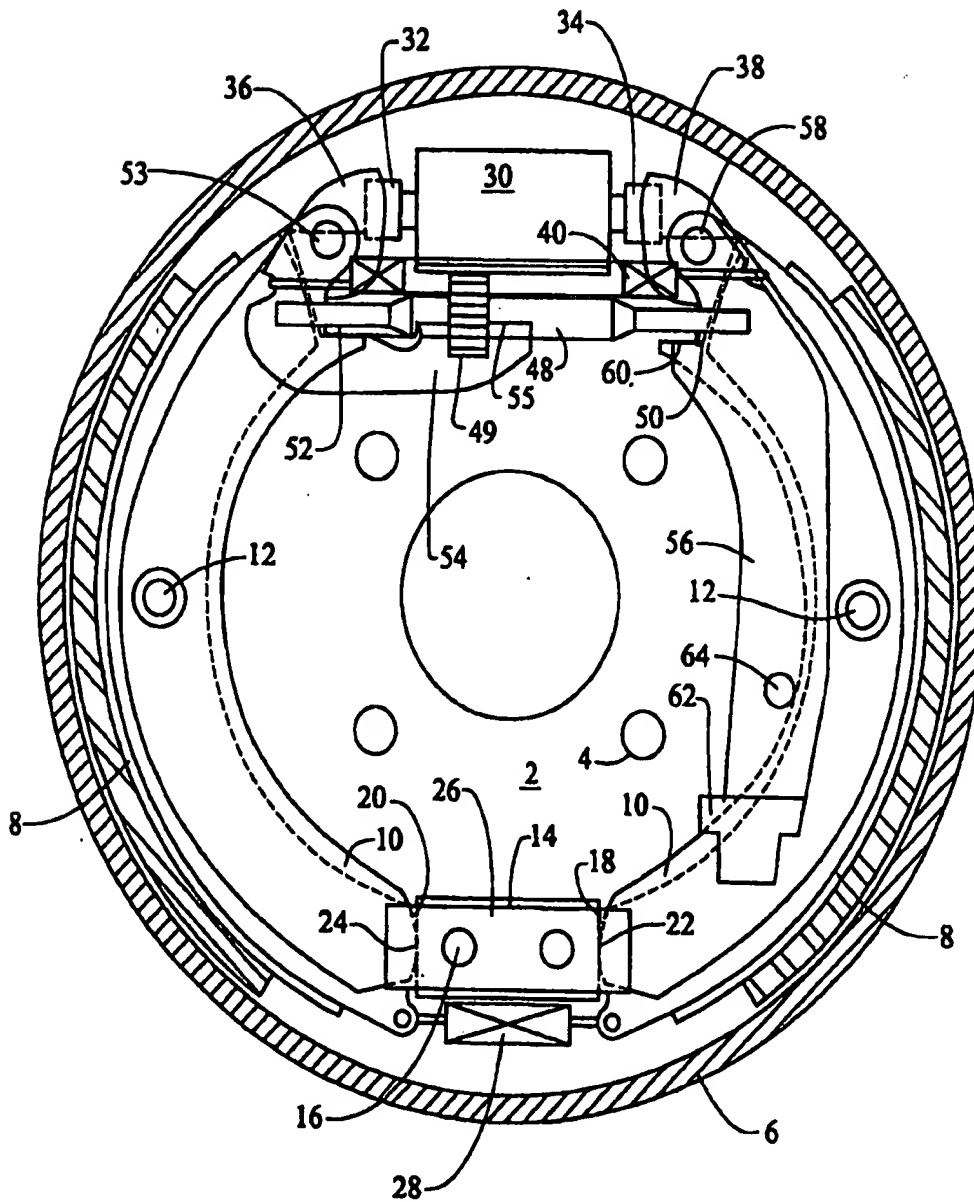
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571) 272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Xuan Lan Nguyen/ 8-14-07  
Primary Examiner  
Art Unit 3683

REPLACEMENT SHEET

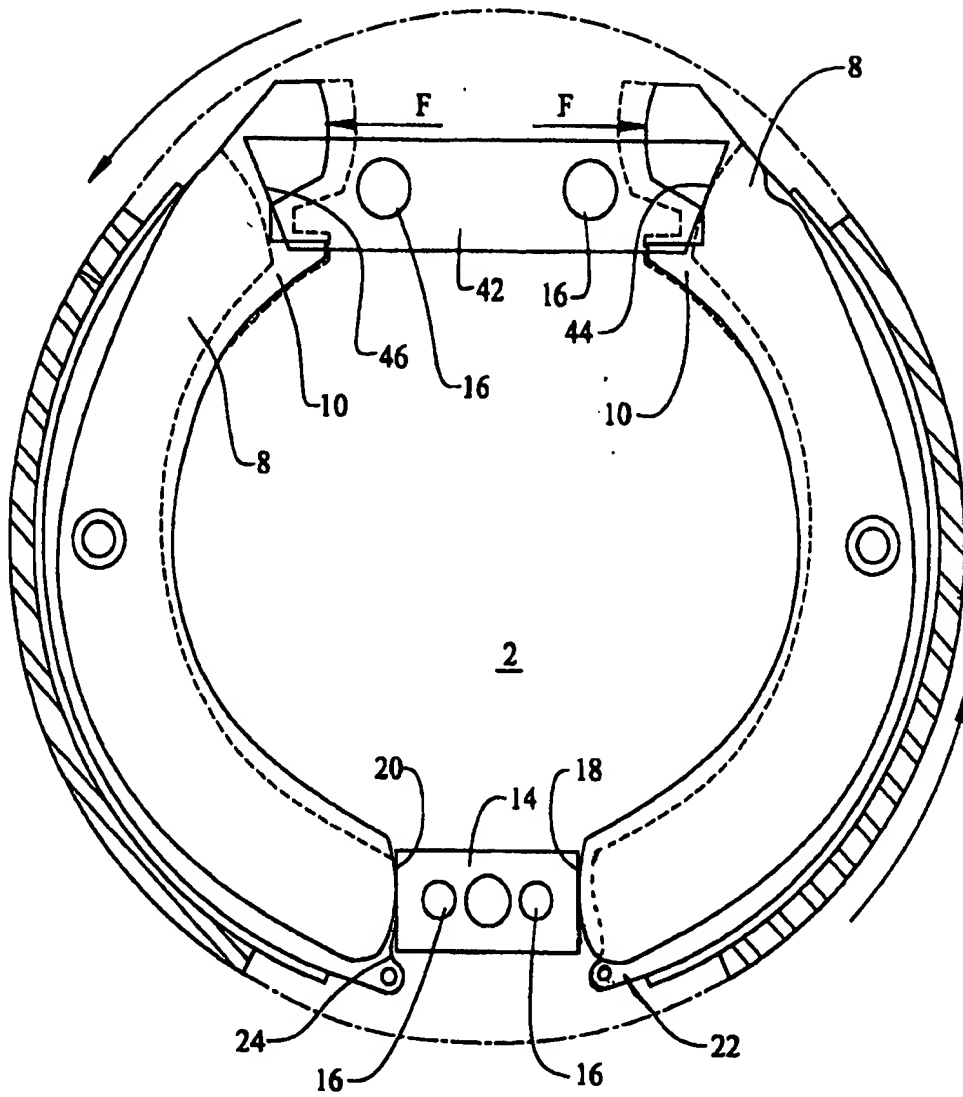
FIG 1



NOT  
approved  
8/14/07  
XLN

REPLACEMENT SHEET

FIG. 2



NOT  
approved  
XLW  
8/14/07